Amendments to the Specification:

Please replace paragraph beginning on page 7, line 14, to page 9, line 13 with the amended paragraph:

In a second embodiment, the inventive composition comprises cyanine dyes of general formula 2.

$$R^{49}$$
 R^{48}
 R^{47}
 R^{46}
 R^{47}
 R^{48}
 R^{47}
 R^{48}
 R^{47}
 R^{48}
 R^{48}

wherein W⁴ and X⁴ may be the same or different and are selected from the group consisting of $-CR^1R^2$, -O-, $-NR^3$, -S-, and -Se; Y⁴ is selected from the group consisting of $-(CH_2)_a$ -CONH-Bm, $-CH_2$ - $(CH_2OCH_2)_b$ -CH₂-CONH-Bm, $-(CH_2)_a$ -NHCO-Bm, $-CH_2$ - $(CH_2OCH_2)_b$ -CONH-Bm, $-CH_2$ - $(CH_2OCH_2)_b$ -CONH-Bm, $-CH_2$ - $(CH_2OCH_2)_b$ -CONH-Bm, $-CH_2$ - $(CH_2OCH_2)_a$ -NIR³)-CH₂-CONH-Bm, $-(CH_2)_a$ -NIR³)-CH₂- $(CH_2OCH_2)_b$ -CH₂-CONH-Bm, $-(CH_2)_a$ -NIR³)-CH₂- $(CH_2OCH_2)_b$ -CH₂-CONH-Bm, $-(CH_2)_a$ -CONH-Bm, $-(CH_2)_a$ -CONH-Bm, -(

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 $(CH_2OCH_2)_b$ - CH_2 - $N(R^3)$ - $(CH_2)_a$ -NHCO-Bm, $-CH_2$ - $(CH_2OCH_2)_b$ - CH_2 - $N(R^3)$ - CH_2 - $(CH_2OCH_2)_d$ -CONH-Bm, $-CH_2$ - $(CH_2OCH_2)_b$ - CH_2 - $N(R^3)$ - CH_2 - $(CH_2OCH_2)_d$ -NHCO-Bm, $-CH_2$ - $(CH_2OCH_2)_d$ - (CH_2OCH_2) $(CH_2)_a$ -NR³R⁴, and -CH₂ $(CH_2OCH_2)_b$ -CH₂NR³R⁴; Z⁴ is selected from the group consisting of -{CH₂}_a-CONH-Dm, -CH₂-{CH₂OCH₂}_b-CH₂-CONH-Dm, -(CH₂)_a-NHCO- $\label{eq:definition} {\sf Dm, -CH_2-(CH_2OCH_2)_b-CH_2-NHCO-Dm, -(CH_2)_a-N(R^3)-(CH_2)_b-CONH-Dm, (CH_2)_a-N(R^3)-(CH_2)_b-CONH-Dm, (CH_2)_a-N(R^3)_b-CONH-Dm, (CH_2)_b-N(R^3)_b-CONH-DM, (CH_2)_b-N(R^3)_b-CONH-DM, (CH_2)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)_b-N(R^3)$ $(CH_2)_c$ -NHCO-Dm, - $(CH_2)_a$ -N(R³)-CH₂- $(CH_2OCH_2)_b$ -CH₂-CONH-Dm, - $(CH_2)_a$ -N(R³)-CH₂- $(CH_2OCH_2)_b - CH_2 - NHCO - Dm, -CH_2 - (CH_2OCH_2)_b - CH_2 - N(R^3) - (CH_2)_a - CONH - Dm, -CH_2 - CO$ $(\mathrm{CH_2OCH_2})_b - \mathrm{CH_2-N(R^3)-(CH_2)_a-NHCO-Dm}, \ -\mathrm{CH_2-(CH_2OCH_2)_b-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3)-CH_2-N(R^3) (CH_2OCH_2)_d$ -CONH-Dm, $-CH_2$ - $(CH_2OCH_2)_b$ - CH_2 - $N(R^3)$ - CH_2 - $(CH_2OCH_2)_d$ -NHCO-Dm, - $(CH_2)_a$ -NR³R⁴, and -CH₂ $(CH_2OCH_2)_b$ -CH₂NR³R⁴; A₂ is a single or a double bond; B₂, C2, and D2 may be the same or different and are selected from the group consisting of -O-, -S-, -Se-, -P-, -CR 1 R 2 , -CR 1 , alkyl, NR 3 , and -C = O; A $_2$, B $_2$, C $_2$, and D $_2$ may together form a 6- to 12-membered carbocyclic ring or a 6- to 12-membered heterocyclic ring optionally containing one or more oxygen, nitrogen, or sulfur atom; a_4 and b_4 independently vary from 0 to 5; R^1 to R^4 , and R^{45} to R^{57} are independently selected from the group consisting of hydrogen, C_1 - C_{10} alkyl, C_5 - C_{20} aryl, C_1 - C_{10} alkoxyl, C_1 - C_{10} polyalkoxyalkyl, C_1 - C_{20} polyhydroxyalkyl, C_5 - C_{20} polyhydroxyaryl, C_1 - C_{10} aminoalkyl, cyano, nitro, halogen, saccharide, peptide, - $CH_2(CH_2OCH_2)_b$ - CH_2 -OH, $-(CH_2)_a - CO_2H$, $-(CH_2)_a - CONH-Bm$, $-CH_2 - (CH_2OCH_2)_b - CH_2 - CONH-Bm$, $-(CH_2)_a - CONH-Bm$, NHCO-Bm, -CH₂-(CH₂OCH₂)_b-CH₂-NHCO-Bm, -(CH₂)_a-OH and -CH₂-(CH₂OCH₂)_b-CO₂H; Bm and Dm are independently selected from the group consisting of a bioactive peptide, a protein, a cell, an antibody, an antibody fragment, a saccharide,

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a glycopeptide, a peptidomimetic, a drug, a drug mimic, a hormone, a m tal chelating agent, a radioactive or nonradioactive metal complex, and an echogenic agent; a and c are independently from 1 to 20; and b and d are independently from 1 to 100.